

X-Gal Solution (20mg/ml)

<u>Product Name</u>	<u>Product Code</u>	<u>Kit Packing</u>
X-Gal Solution (20mg/ml)	ML212-1ML	1ml

Introduction:

X-gal (also abbreviated BCIG for 5-bromo-4-chloro-3-indolyl- β -D-galactopyranoside) is an organic compound consisting of galactose linked to a substituted indole. X-gal is often used in molecular biology to test for the presence of an enzyme, β -galactosidase. It is also used to detect activity of this enzyme in histochemistry and bacteriology. X-gal is one of many indoxyl glycosides and esters that yield insoluble blue compounds similar to indigo dye as a result of enzyme-catalyzed hydrolysis.

Description:

HiMedia's X-Gal Solution (20mg/ml) is an inert chromogenic substrate for beta-galactosidase which hydrolyzes X-Gal into colorless galactose and 4-chloro-3-brom-indigo, forming an intense blue precipitate. It is used in various Microbiology and Molecular Biology experiments. It is commonly used to distinguish between recombinants and non-recombinants by lacZ α -complementation with appropriate vectors and hosts. Induction of the lacZ gene with IPTG leads to the hydrolysis of X-Gal and to the development of blue colonies. X-Gal Solution (20mg/ml) is filtered through 0.22 μ m membrane and is ready-to-use in conjunction with IPTG for blue/white colony screening.

Features:

- Hassle Free
- Time Save
- Ready-to-Use
- Sensitive
- Filter Sterile

Content

X-Gal Solution (20 mg/ml) in DMSO.

Intended Use

Recommended for use in blue/white colony screening experiments.

Storage

Store the X-Gal Solution (20mg/ml) at 2-8°C. Under recommended condition, the solution is stable for 6 months. The reagent is filter sterilized and should be open under aseptic conditions. The appearance of light yellow color of X-Gal Solution (20mg/ml), does not have influence on its quality.

General Preparation Instructions:

1. Read the procedure carefully before starting the experiment.

Recommended Procedure for use:

Prepare the media plates as follows-

- A. **On top of Agar Plates:** Spread out 40 µl of the ready-to-use X-Gal Solution evenly on the LB agar plates across the entire Petri dish surface area.

OR

- B. **Into the media:** Directly add 2 µl of ready-to use X-Gal Solution to every 1 milliliter of molten LB agar (temperature 50°C or less), mix well and pour.
(For example: Add 200µL of X-Gal solution to per 100 ml of LB agar before pouring.)

Note: The above mentioned concentration of X-Gal to be used is recommended, user can alter the concentration as per their requirement.

Note: For Blue/White colony screening, X-Gal to be used in combination with IPTG at required concentrations.

On top of agar plates: Spread out Isopropyl-b-D-thiogalactoside (IPTG, recommended concentration 0.1M) at required concentration along with X-Gal Solution.

Into the media: Directly add Isopropyl-b-D-thiogalactoside (IPTG, recommended concentration 0.1M) at required concentration along with X-Gal Solution prior to pouring.

Warning and Precautions

Not for Medicinal Use. Read the SDS carefully before beginning the protocol. Wear protective gloves/protective clothing/eye protection/face protection. Follow good clinical laboratory practices while handling clinical samples. Standard precautions should be followed as per established guidelines. Safety guidelines may be referred in safety data sheets of the product.

Limitation

False positives results can be obtained due to some ambiguous colonies needing rescreening. In such case, increase the concentration of X-Gal Solution for enhanced blue color of true non-recombinant colonies.

Performance and Evaluation

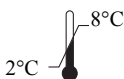
Performance of the product is expected when the solution is used as per the protocol mentioned in the product insert within the expiry period when stored at recommended temperature.

Safety Information

The X-Gal Solution (20 mg/ml) is for laboratory use only, not for drug, household or other uses. This buffer may cause irritation to eyes and skin. Take appropriate laboratory safety measures and wear gloves and safety goggles when handling. Not compatible with disinfecting agents containing bleach. Please refer the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

Technical Assistance

At HiMedia we pride ourselves on the quality and availability of our technical support. For any kind of technical assistance, mail at mb@himedialabs.com.



Storage temperature



Do not use if package is damaged



HiMedia Laboratories Private Limited,
Reg. Off: Plot No. C-40, Road No. 21Y,
MIDC, Wagle Industrial Area, Thane,
(West) 400604, Maharashtra, INDIA.
Web: www.himedialabs.com



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Disclaimer :

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HiMedia Laboratories Pvt. Ltd. Reg.office : Plot No. C-40, Road No. 21Y, MIDC, Wagle Industrial Area, Thane, (West) 400604, Maharashtra, INDIA.
Customer Care No.: 00-91-22-6116 9797 Tel: 00-91-22-6147 1919, 6903 4800 Email: techhelp@himedialabs.com Website: www.himedialabs.com